(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 18 August 2005 (18.08.2005)

PCT

(10) International Publication Number WO 2005/076383 A3

(51) International Patent Classification⁷: H01L 51/30,
C09K 19/34, C07D 487/22, C07F 1/08, 3/06, 15/00, 15/04

(21) International Application Number:

PCT/EP2005/000556

(22) International Filing Date: 18 January 2005 (18.01.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

04447032.6

10 February 2004 (10.02.2004) EP

(71) Applicant (for all designated States except US): UNIVER-SITE LIBRE DE BRUXELLES [BE/BE]; Avenue F.D. Roosevelt 50, CP 161, B-1050 BRUSSELS (BE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): DE CUPERE, Vinciane [BE/BE]; Rue du Tienne 12a, B-1460 COURT-SAINT-ETIENNE (BE). TANT, Julien [BE/BE]; Avenue des Ménestrels 111, B-1080 BRUSSELS (BE). GEERTS, Yves [BE/BE]; Avenue de l'Eglise St Julien 10a, B-1160 BRUSSELS (BE).

(74) Agents: VAN MALDEREN, Michel et al.; pronovem - Office Van Malderen, Avenue Josse Goffin 158, B-1082 Brussels (BE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

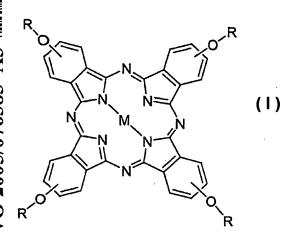
Published:

- with international search report

(88) Date of publication of the international search report: 24 November 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PHTHALOCYANINE DERIVATIVES, THEIR USE AS HOMEOTROPICALLY ALIGNED LAYER IN ELECTRONIC DEVICES AND METHOD FOR THE MANUFACTURING THEREOF



(57) Abstract: The present invention discloses a liquid crystalline tetra alkyloxy-substituted phthalocyanine derivative with the following structure: (I) wherein M is a metal such as zinc (Zn), copper (Cu), platinum (Pt), palladium (Pd), ... or two atoms such as 2 H or 2 Li, and R is the followed branched aliphatic chain: (II) with n=0 and x=6-30 y=6-30 z=0-30 or n=1 and x=10-30 y=6-30 z=0-30 or n>1 and n=10 and n=11 and n=12.

WO 2005/076383 A3 ||||||